

REMARKS

Claims 1-21 are pending in this application; claims 1, 5, 9, 12-18 and 20-21 being independent. In light of the remarks made herein, Applicants respectfully request reconsideration and withdrawal of the outstanding rejections.

The Official Action

In the outstanding Official Action, the Examiner rejected claims 1-8, 12, 13, 15, and 16 under 35 U.S.C. § 102(e) as being anticipated by *Vellanki et al.* (USP 5,999,979); and rejected claims 9-11, 14, and 17 under 35 U.S.C. § 103(a) as being unpatentable over *Vellanki et al.* in view of *Asano* (USP 5,881,240). Applicants respectfully traverse these rejections.

Drawings

The Examiner objected to the drawings, asserting certain figures have no reference numbers for use in the specification.

Applicants have submitted herewith a Drawing Correction Authorization Request substituting new drawings for Figs. 9 and 11-19. Applicants have further amended the specification to include these reference numbers. Applicants respectfully request the withdrawal of the Examiner's objections based upon these submissions. It is respectfully submitted that no new matter has been added to any of these figures by these substitutions.

Claim Rejections - 35 U.S.C. § 102

With regard to the Examiner's rejection of claim 1, the Examiner asserts *Vellanki et al.* teaches a transfer selecting unit selecting a method of data transfer based on the

attribute information of data acquired by the attribute information acquiring unit, citing to col. 6, lines 25-35.

It is respectfully submitted that *Vellanki et al.* discloses a method and apparatus for determining a most advantageous protocol for use in a computer network. Specifically, *Vellanki et al.* teaches at col. 6, lines 2-8:

[T]he inventive autodetect mechanism simultaneously employs multiple threads, through multiple connections, to initiate communication with the server computer, e.g., server 104. Each thread preferably employs a different protocol and requests the server computer to respond to the client computer using the protocol associated with that thread.

Additionally, *Vellanki et al.* teaches at col. 6, lines 14-34:

Upon receiving a request, server 104 responds with data using the same protocol as that associated with the thread on which the request arrives. If one or more protocols is blocked and fails to reach server 104 (e.g., by a firewall), no response employing the blocked protocol would of course be transmitted from server 104 to client computer 106. Further, some of the protocols transmitted from server 104 to client computer 106 may be blocked as well. Accordingly, client computer may receive only a subset of the responses sent from server 104.

In one embodiment, client computer 106 monitors the set of received responses. If the predefined "best" protocol is received, that protocol is then selected for communication by client computer 106. The predefined "best" protocol may be defined in advance by the user and/or the application program. If the predefined "best" protocol is, however, blocked (as the request is transmitted from the client computer or as the response is transmitted from the server, for example) the most advantageous protocol may simply be selected from the set of protocols received back by the client computer.

In contrast, the present invention as set forth in claim 1 recites, *inter alia*, a data transfer apparatus comprising a transfer selecting unit selecting a method of data transfer based on the attribute information of data acquired by the attribute information acquiring unit. It is respectfully submitted that *Vellanki et al.* teaches determining what protocol is to

be used for communication based on responses that are received from server 104. These protocols may be defined in advance by the user and, should the "best" protocol be blocked, an alternative protocol may be selected from the set of protocols received back by the client computer. It is respectfully submitted that *Vellanki et al.* fails to teach or suggest selecting a method of data transfer based on the attribute information of data acquired by the attribute information acquiring unit. As such, it is respectfully submitted that claim 1 is not anticipated by *Vellanki et al.*

It is respectfully submitted that claims 5, 9, 12-13, and 15-16 contain elements similar to those discussed above with regard to claim 1 and, thus, are not anticipated by *Vellanki et al.* for the reasons set forth above with regard to claim 1. It is further respectfully submitted that claims 2-4, 6-8, and 10-11 are dependent on allowable claims 1, 5, and 9, respectively, and, thus, are allowable at least for the reasons set forth above based upon their dependency on allowable claims 1, 5, and 9, respectively.

Claim Rejections - 35 U.S.C. § 103

With regard to the Examiner's rejection of claim 9 under 35 U.S.C. § 103(a), the Examiner relies on *Vellanki et al.* to teach an equipment attribute information acquiring unit, citing to col. 6, lines 5-10, 21-23, and 25-27, and an equipment attribute information selecting unit, citing to col. 6, lines 25-35. The Examiner additionally notes that, in the disclosure of *Vellanki et al.*, the client receives a number of protocols, or attributes, to choose from and it chooses the most advantageous for communication.

As noted above, *Vellanki et al.* teaches employing multiple threads through multiple connections to initiate communication with the server computer. Each thread employs a different protocol and requests the server computer to respond to the client computer using

the protocol associated with that thread. If the predefined "best" protocol is received, that protocol is then selected for communication by the client computer. If the predefined "best" protocol is blocked, the most advantageous protocol may simply be selected from the set of protocols received back by the client computer.

In contrast, the present invention as set forth in claim 9 recites, *inter alia*, a data transfer apparatus comprising an equipment attribute information acquiring unit acquiring attribute information of an equipment connected to a network and an equipment attribute information selecting unit selecting attribute information of first and second equipments among equipment attribute information acquired by the equipment attribute information acquiring unit.

It is respectfully submitted that *Vellanki et al.* merely teaches determining whether or not a response has been received. *Vellanki et al.* fails to teach acquiring attribute information of an equipment connected to a network and an equipment attribute information selecting unit selecting attribute information of first and second equipments among equipment attribute information acquired by the equipment attribute information acquiring unit.

It is respectfully submitted that *Asano* fails to cure the deficiencies of the teachings of *Vellanki et al.*, assuming these references are combinable, which Applicants do not admit, as *Asano* fails to teach the equipment attribute information acquiring unit or the equipment attribute information selecting unit of the present invention set forth in claim 9. As such, it is respectfully submitted that claim 9 is not obvious over *Vellanki et al.* in view of *Asano*.

It is respectfully submitted that independent claims 14 and 17 contain elements similar to those discussed above with regard to claim 9. As such, it is respectfully submitted that claims 14 and 17 are allowable for the reasons set forth above with regard to claim 9.

New Claims

By this Amendment, Applicants have added new claims 18-21. It is respectfully submitted that these new claims are allowable over the art cited by the Examiner as the art, either alone or in combination, assuming these references are combinable, which Applicants do not admit, fails to teach or suggest an attribute information acquiring unit acquiring attribute information using a common protocol.

CONCLUSION

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Catherine M. Voisinnet (Reg. No. 52,327) at the telephone number below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachment: Version With Markings to Show Changes Made

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

Please replace the paragraph beginning on page 18, line 3, with the following rewritten paragraph:

--Fig. 9 represents a hierarchy of protocols and command sets in accordance with the high speed serial bus IEEE1394 described above. As shown in Fig. 9, high speed serial bus standard alone has difference in transfer methods in the physical layer (synchronous transfer method 51/asynchronous transfer method 52), difference in application protocols thereabove (synchronous transfer protocols 53/asynchronous command protocol 54/SBP2 (Serial Bus Protocol 2)/DPP (Direct Print Protocol) 55), difference in packet formats, difference in command sets and difference in file formats. These differences have been handled separately. By the data transfer apparatus in accordance with the present embodiment, it becomes possible to handle equipments having these differences by the same operation. More specifically, it becomes possible for the user or the application program to transmit/receive data by the uniform, same operation, even when the counterpart equipment has different protocol or different command set.--

Please replace the paragraph beginning on page 19, line 1, with the following rewritten paragraph:

--Fig. 11 represents an example of a network to which a DVD 61, a television (CS (Communication Satellite) tuner) 62 and a printer 63 are connected. The data transfer

apparatus described above is incorporated in the DVD 61, television 62 and the printer 63, and the user controls the DVD 61 and the printer 63 through the television 62.--

Please replace the paragraph beginning on page 19, line 11, with the following rewritten paragraph:

-- Fig. 13 represents attribute information of the equipments shown in Fig. 12. The first three lines represent attribute information of the printer 63, including name of the equipment, function of the equipment, manufacturer name, protocol name and file name of the icon. By the reference of a file name of the icon, the icon of each equipment is displayed on the television screen. The fourth and the following lines represent attribute information of the DVD 61.--

Please replace the paragraph beginning on page 19, line 25, with the following rewritten paragraph:

--Fig. 14 represents an example in which the DVD 61 displayed at the center of the television screen of Fig. 12 is selected, where accessible data or directory 71 is displayed on the side of the DVD icon 61. Information representing format is displayed in the parentheses of each directory 71 in Fig. 14. Date of generation, data size or the like may be displayed in the parentheses. A status file of the printer 63 may be displayed when the printer 63 is selected, and when an air conditioner, not shown, is selected, a file of a screen for setting of the operation may be displayed.--

Please replace the paragraph beginning on page 19, line 33, with the following rewritten paragraph:

--Fig. 15 shows a television screen when "W-Cup" is selected among the directories 71 displayed in Fig. 14. The displayed directories 72 include titles already recorded (when the title is not clear, time of recording). Among the directories 72, a soccer game of "Japan- Croatia" is selected, and when the television 62 is selected as a receiving apparatus, the television 62 receives video data (MPEG2) of this game from the DVD 61 and provides screen display. According to IEEE1394, the connected DVD 61 operates by the AV/C command, and therefore, the command is transmitted from the television 62 to the DVD 61 and the operation of the DVD 61 starts. It is noted, however, that it is unnecessary for the user or the application program to know the contents of the command, in order to perform transmission/reception of the data.--

Please replace the paragraph beginning on page 20, line 11, with the following rewritten paragraph:

--Fig. 16 shows a television screen when "MyDisk" is selected from the directories 71 displayed in Fig. 14 and "WCup" is selected from the directories 71 of still images displayed. According to IEEE1394, SBP2 is defined, for example, as a data transfer protocol by the hard disk. Therefore, a method of access different from that for the video data is necessary. For example, when a file name "Japan.jpg" is selected from the directories 73 of still images and the printer 63 is selected as the destination of transmission as shown in Fig. 17, a protocol for the printer 63, for example, DPP is used to transmit the data of the still image. The television 62 selects the protocol and the

command set based on the attribute information of the printer equipment and the attribute information of the data to be transmitted (Japan.jpg), issues a data transmission command to the DVD 61, and issues a data reception command to the printer 63, whereby the data is transferred directly from the DVD 61 to the printer 63.--

Please replace the paragraph beginning on page 20, line 25, with the following rewritten paragraph:

--As to the FTP command of UNIX, the command must pass through the equipment (television 62) which issues a control request, as the communication is realized by transmission/reception between the equipment (television 62) issuing the control request and the equipment (DVD 61 or printer 63) controlled by the command. Compared with such communication, the data transfer apparatus in accordance with the present embodiment realizes direct transmission/reception of data between the DVD 61 and the printer 63, and hence the speed of processing can be improved.--

Please replace the paragraph beginning on page 21, line 2, with the following rewritten paragraph:

--Fig. 19 shows an example of a television screen when a still camera 81 is connected via infrared communication. As the still camera is connected not by the network (by infrared communication), the connection is represented by a dotted line. When a plurality of physical layers or protocols are handled, it may be possible to indicate the difference by different thickness of characters, different thickness of lines, different types or different colors of lines, and the difference in transfer capability may be displayed by

different thicknesses of lines, so as to allow the user to instinctively determine what equipment should be used to avoid long operation time, for example. In that case, communication interface (corresponding to network I/F of Fig. 3) corresponding to a plurality of physical layers is necessary.--

IN THE CLAIMS:

New claims 18-21 have been added.